U.S. House of Representatives
Committee on Transportation and Infrastructure
Washington, DC 20515

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May 8, 2009

SUMMARY OF SUBJECT MATTER

TO: Members of the Subcommittee on Aviation

FROM: Subcommittee on Aviation Staff

SUBJECT: Hearing on "The Economic Viability of the Civil Reserve Air Fleet Program"

PURPOSE OF HEARING

The Subcommittee on Aviation will meet at 10:00 a.m. on Wednesday, May 13, 2009, in Room 2167 Rayburn House Office Building to receive testimony on the Economic Viability of the Civil Reserve Air Fleet Program.

BACKGROUND

The Civil Reserve Air Fleet (CRAF) is a voluntary program through which the nation's passenger and cargo airlines provide stand-by commitments to support the mobilization of troops and equipment in the event of a major military contingency. The CRAF program was established in 1951 by President Truman to augment the Department of Defense's (DOD) fleet of military transport aircraft during times of high demand for airlift services.

In 1987, President Reagan issued the National Airlift Policy, which declared that military and commercial resources are "equally important" and "interdependent" in meeting wartime airlift requirements:

> The commercial air carrier industry will be relied upon to provide the airlift capability required beyond that available in the organic military airlift fleet. It is therefore the policy of the United States to recognize the interdependence of military and civilian airlift capabilities in meeting wartime airlift requirements, and to protect those national security interests contained within the commercial air carrier industry.[1]

[1] National Airlift Policy, National Security Decision Directive 280 (June 24, 1987).

According to the U.S. Transportation Command (USTRANSCOM), during a period of national mobilization (i.e., if the military had to fight more than one major theater war at the same time or operate in a larger crisis), CRAF would meet approximately 93 percent of DOD's passenger and approximately 37 percent of DOD's cargo requirements.

CRAF is also an extremely cost effective program. A 1994 RAND study stated that, at that time, replacing the CRAF capability with military aircraft would have cost DOD about $1 billion to $3 billion annually over the past thirty years.[2] This equates to a $30 billion to $90 billion cost avoidance reported in 1994 dollars. USTRANSCOM, using Office of Management and Budget cost-of-living figures, estimates the cumulative total in 2009 dollars to be in the range of $43 billion to $128 billion in cost avoidance.

Under the CRAF business model, U.S. commercial air carriers contractually commit aircraft and air crews to be activated for use by DOD, at predetermined rates, during times of crisis. In exchange for that commitment, DOD makes "CRAF peacetime business"[3] available to carriers that participate in the program. Carriers are entitled to peacetime business in proportion to the mobilization capacity that they have committed to the program. Most peacetime CRAF missions are flown by charter airlines that share revenue with large scheduled airlines and integrated cargo carriers (e.g., Federal Express (FedEx) and United Parcel Service (UPS)), which have the greatest entitlement to CRAF business because of their committed capacity (these arrangements are known as "teaming arrangements," which are explained further below).

CRAF has been formally activated only twice: the first instance occurred for Operations Desert Shield/Storm from August 18, 1990, through May 24, 1991; the second activation, during Operation Iraqi Freedom, lasted from February 8, 2003, through June 18, 2003.[4] However, since September 11, 2001, the annual business tendered to CRAF carriers has been more than four times the average annual CRAF business prior to September 11. As required by section 356 of the Fiscal Year (FY) 2008 National Defense Authorization Act (P.L. 110-181), the Institute for Defense Analyses (IDA) published a report on CRAF last August, in which it stated:

> Projected CRAF mobilization commitments from the large scheduled carriers will meet planning targets in DOD warplans. Both cargo and passenger charter airlines will provide capacity sufficient to meet DOD's ongoing requirements in support of OIF, OEF, and other routine operations. However, given the long-term downward trend in the commercial passenger charter business [as well as a projected decrease in military business], action will likely be needed to ensure sufficient DOD access to passenger airlift capacity to meet unexpected surges in military requirements without requiring activation of CRAF.[5]

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[2] RAND, Finding the Right Mix of Military and Civil Airlift, Issues and Implications Volume 1. 21 (1994).
[3] The term "CRAF peacetime business" generally refers to DOD charter cargo and passenger airlift contracts required to meet DOD's airlift needs outside of formal CRAF activation. So while the U.S. is currently engaged in armed conflict in both Iraq and Afghanistan, airlift contracts in support these operations (and elsewhere) are still often referred to as "peacetime business."
[4] William Knight and Christopher Bolkcom, CRS Report for Congress: Civil Reserve Air Fleet (CRAF) 3 (2008).
[5] The Institute for Defense Analyses, Civil Reserve Air Fleet: Economics and Strategy ES 1(2008).

A July 2008 report by the Council for Logistics Research (CLR)[6] and an October 2007 Congressional Budget Office (CBO)[7] report also both expressed concerns that an anticipated decrease in DOD commercial airlift requirements, due to the winding down of Middle East operations, could adversely impact CRAF carriers. Passenger charter carriers in particular, which have experienced a shrinking civilian commercial market and which provide over 90 percent of DOD's peacetime passenger airlift (in FY 2008, six passenger charter airlines provided 93 percent of DOD's passenger airlift, three of which provided 77 percent), would be particularly vulnerable.[8]

Should the passenger charter industry continue to decline, or even disappear, the immediate effect would be airlift shortfalls and delays within the DOD transportation system. This concern was heightened last April when ATA Airlines (ATA), which at the time provided approximately 10 percent of DOD's passenger airlift, declared bankruptcy and abruptly ceased operations resulting in temporary service delays of two to six days. In the longer-term, as IDA suggests, DOD may become more reliant on CRAF activations to meet passenger airlift requirements. In turn, more frequent CRAF activations could potentially have a disruptive affect on scheduled airlines and adversely impact long-term CRAF participation.

IDA put forward a series of recommendations as part of an overall "assured supply model," the thrust of which is to improve CRAF incentives and business practices to assure the industry's long-term commitment to DOD's peacetime, surge and mobilization requirements. Section 1033 of the FY 2009 National Defense Authorization Act (FY 2009 NDAA) (P.L. 110-417) provides USTRANSCOM with "assured business" authority to further incentivize the CRAF program by enabling USTRANSCOM to increase the amount of guaranteed business it offers CRAF carriers each year. In addition, the FY 2009 NDAA requires the Secretary of Defense to incentivize CRAF carriers to use newer, more efficient aircraft and to improve the predictability of DOD charter requirements. USTRANSCOM is reviewing and taking action to respond to both IDA's recommendations and the requirements of the FY 2009 NDAA.

I. The Structure of the CRAF Program

Thirty-four carriers (1,083 aircraft) participate in the CRAF program. All CRAF participants must be U.S. carriers fully certified by the Federal Aviation Administration (FAA), and meet the standards of the Federal Aviation Regulations pertaining to commercial airlines found in 14 Code of Federal Regulations (C.F.R.) part 121. Moreover, all carriers must demonstrate that they have provided substantially equivalent and comparable commercial service for one year before submitting their offer to fly for the DOD.

In addition to maintaining certification as a part 121 air carrier, CRAF participants must also undergo a comprehensive onsite technical evaluation that assesses an air carrier's ability meet all DOD Quality and Safety requirements, as outlined in title 32 C.F.R. part 861. After it is determined an air carrier meets all requirements, the carrier is approved by the Commercial Airlift Review Board to provide air transportation services to the DOD.

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[6] Council for Logistics Research, Inc., Civil Reserve Air Fleet Study Report (2008).

[7] Congressional Budget Office, Issues Regarding the Current and Future Use of the Civil Reserve Air Fleet (2007).

[8] *Id.* at 6; *see also*, IDA *supra* note 5 at ES 1.

To join CRAF, a carrier must commit at least 30 percent of its CRAF-capable passenger fleet, and 15 percent of its CRAF-capable cargo fleet. Air carriers must also commit and maintain at least four complete crews for each aircraft in CRAF (crew members must be U.S. citizens not encumbered with military commitments - i.e., military reservists).[9]

CRAF has three main segments: international, national, and aeromedical evacuation. Assignment of aircraft to a segment depends on the nature of the requirement and the aircraft performance characteristics needed:

- **International**: Most of the aircraft in the CRAF are committed to the international segment, which is further divided into the long-range and short-range sections. The long-range international section consists of commercial airliners capable of transoceanic operations (a range of at least 3,500 nautical miles (nm)). Medium-sized passenger and cargo aircraft make up the short-range international section supporting near offshore airlift requirements.

- **National:** The much smaller national segment of the fleet also has two sections: a domestic section for most transportation within the U.S. and a small Alaska section that provides airlift within U.S. Pacific Command's area of responsibility, specific to Alaska needs. The domestic section includes only passenger aircraft, and the Alaskan section, only cargo aircraft.

- **Aeromedical Evacuation**: The aeromedical evacuation segment assists in the evacuation of casualties from operational theaters to hospitals in the continental U.S. Kits containing litter stanchions, litters, and other aeromedical equipment are used to convert civil Boeing 767 passenger aircraft into air ambulances.[10]

The commander of USTRANSCOM, with the concurrence of the Secretary of Defense, has the authority to activate CRAF, which can be called up incrementally in three stages. During a crisis, if the U.S. Air Force Air Mobility Command (AMC) has a need for additional aircraft, it would request the USTRANSCOM commander to take steps to activate the appropriate CRAF stage. Each stage of the CRAF activation is only used to the extent necessary to provide the amount of civil augmentation airlift needed by DOD:[11]

- **Stage I** covers minor operations or operations in which adequate time is available so that a small augmentation of the military's fleet is sufficient to move the required people or cargo. A Stage I CRAF activation of long-range international cargo and passenger aircraft occurred from August 1990 to January 1991 in support of Operation Desert Shield, and a Stage I activation of long-range international passenger aircraft occurred from February to June 2003 in support of Operation Iraqi Freedom.

- **Stage II** is tailored for a major theater war that requires rapid deployment of forces. From January through late-May 1991, the long-range international segment was activated to Stage

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[9] U.S. Air Force (USAF), CRAF: Fact Sheet, July 2007, at http://www.af.mil/factsheets/factsheet.asp?id=173.

[10] *Id.*

[11] *Id.*

II for both passenger and cargo aircraft in support of Operation Desert Shield/Desert Storm.

- **Stage III** is a period of national mobilization. A Stage III CRAF activation has never occurred. It was seriously considered after the Desert Storm air war began, in late January 1991, but was rendered unnecessary by the short duration of the conflict.[12]

When notified of a call-up, the carrier response time to have its aircraft ready for a CRAF mission is 24 to 48 hours after the mission is assigned by AMC. Carriers continue to operate and maintain the aircraft with their resources; however, AMC controls the aircraft missions.[13]

Aircraft in the Different Stages and Segments of CRAF

CRAF Stage			I	II	III
International	Long	Passenger	43	123	458
		Cargo	31	73	232
	Short	Passenger		10	292
		Cargo		11	24
National	Domestic	Passenger		23	36
		Cargo			0
	Alaskan	Passenger			
		Cargo		2	2
Aeromedical Evacuation				25	39
TOTAL			74	267	1083

Source: USTRANSCOM

II. CRAF and the Industry

a. Contractual Relationship: Mobility Value (MV) Points, Entitlements, Rate Structure and Other Incentives

To incentivize CRAF participation, the DOD's $2.5 billion a year peacetime charter airlift business for moving personnel and cargo, is allocated exclusively among participating carriers. A CRAF carrier earns "entitlements" to peacetime business in direct proportion to the capacity that carrier commits, as measured by MV points, vis-à-vis the total mobilization commitments provided to the government.

Upon acceptance, the CRAF carrier's aircraft are assigned MV points and are assigned to a specific segment of the program. MV is based on the range, payload, and productive utilization rate of aircraft compared to the baseline aircraft, the Boeing B-747-100. MV point bonuses are awarded for aircraft assigned to CRAF Stage I, the Air Evacuation segment and for certain range and payload

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[12] CBO, *supra* note 7, at 3.

[13] USAF, *supra* note 10.

characteristics.[14] According to USTRANSCOM officials, the Command will revise the MV point process in FY 2010 to give even more points to those aircraft in Stage I. The new system will further incentivize carriers to commit aircraft to Stage I where there is a higher risk of activation.

The current ratemaking procedure sets rates separately for several classes of aircraft (e.g., large, medium and small passenger aircraft; large, medium, and combination cargo aircraft). Within each class, a rate is established based on:

- The prior year's average operating costs of the aircraft serving that class (weighted by each aircraft's share of revenues in the class);
- Escalation clauses adjusted for fuel prices; and
- A rate of return based on the larger of either: 1) 10 percent of average operating costs; or 2) 11 percent of invested capital (prorated to the share of business a specific aircraft does for DOD). Rates of return are paid out in fees; participating airlines are currently earning about $250 million in fees.[15]

In addition to CRAF peacetime business, other incentives for CRAF participation include:

- **The Fly America Act (49 U.S.C. § 40118),** which requires the use of U.S. carriers to transport personnel and goods if the government pays for such transportation, and the service is: *available*, if between the U.S. and a place outside the U.S.; or, *reasonably available*, if between two places outside the U.S.. Exceptions are authorized if pursuant to bilateral and multilateral agreements.

- **The Fly CRAF Act (49 U.S.C. § 41106)**, which requires all DOD agencies to use CRAF carriers if the service is: *available*, if between two places inside the US; *available*, if between the U.S. and a place outside the U.S.; or, *reasonably available*, if between two places outside the U.S..

- **The General Services Administration (GSA) City Pair Program** that provides approximately $2.4 billion a year in business to CRAF carriers. The GSA city pairs program is an annual contract with commercial scheduled airlines for official government-wide travel that provides individual ticketed passenger seats at discounted airfares on over 5,000 routes. CRAF participation is a prerequisite for contract award. Since most scheduled service airlines do not want to participate in peacetime charter business, the GSA City Pairs program provides an additional incentive for scheduled airlines to participate in CRAF.

- **The DOD's Worldwide Express Cargo (WWX)** program provided approximately $115 million in business to CRAF carriers in FY 2008. WWX is for international small package express door-to-door delivery of urgent letters and packages weighing up to and including 300 lbs. In addition, **DOD Tenders** cargo program for international heavyweight (more than 301 lbs.) freight delivery provided $417 million in business to CRAF carriers in FY 2008.

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[14] CLR, *supra* note 6, at 19.

[15] IDA, *supra* note 5, at 13.

b. Teaming Arrangements

Scheduled carriers, which provide the bulk of CRAF mobilization capacity commitments (thus earning the most entitlements to DOD business), are not well organized to operate charter flights, which make up the bulk of CRAF peacetime demand. Therefore, industry teaming arrangements are a major feature of the CRAF program. The charter airlines (such as Omni Air International, Gemini, North American, Evergreen International, Polar, ASTAR, and Atlas) that currently provide over 95 percent[16] of the CRAF peacetime flying are teamed with major, scheduled airlines and integrated cargo carriers (such as United, American, Delta, Northwest, Alaska, FedEx, and UPS that provide most of the mobilization commitments (83 percent in 2006).[17]

According to USTRANSCOM, three industry teams currently handle approximately 90 percent of CRAF peacetime business: the Alliance team, managed by Evergreen International and World Airways, handles approximately 43 percent; a team led by FedEx handles between 38 percent and 39 percent; and a team led by UPS handles approximately 9 percent.

CRAF Carriers and Teams[18]

Alliance Team	FEDEX Team	UPS Team	Independents
American Airlines	Air Transport Int'l	ABX Air	AirTran Airways*
Arrow Air	Atlas Air	Alaska Airlines	Allegiant Air*
ASTAR Air Cargo	Northwest Airlines	Kalitta Air	Continental Airlines
Delta Air Lines	Omni Air Int'l	National Air Cargo	Frontier Airlines*
Evergreen Int'l	Polar Air Cargo	Ryan Int'l Airlines	Hawaiian Airlines
North American	Tradewinds Airlines	Southern Air	JetBlue Airways
United Airlines	Federal Express	United Parcel Service	Lynden Air Cargo
US Airways			Miami Air Int'l
World Airways			MN Airlines
			Northern Air Cargo
			Southwest Airlines*

Source: USTRANSCOM

Airlines are free to form teams, join teams, or operate independently.[19] Teaming agreements are negotiated annually, and the composition of teams changes yearly. Through teaming arrangements, charter carriers effectively pay commissions from the fees they earn to the scheduled

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[16] *Id.* at ES-2.

[17] *Id.*

[18] Asterisk represents aircraft committed to the national segment only.

[19] Independent carriers often sell MV points to one of the three teams. For example, the FedEx team has purchased the MV points earned by Continental Airlines and Hawaiian Airlines. CLR, *supra* note 6, at 29.

carriers for their entitlements to DOD business.[20] Scheduled carriers, in turn, do little peacetime CRAF flying, but are accepting the risk that their aircraft will be activated in exchange for payments from their other team members.

DOD does not regulate fee sharing within CRAF teams. However, DOD does hold team members jointly and severally liable for: 1) Mission Award – the actual peacetime CRAF flights that contractors have committed to; 2) CRAF Commitment – aircraft obligated to perform by carriers during a formal activation of CRAF Stages I, II or III; 3) and Schedule Reliability – USTRANSCOM requires an 85 percent on-time departure rate, and if a contractor does not perform, contractual remedies can be sought against other team members.

IDA notes that CRAF teams are generally composed of both cargo and passenger carriers, and that this system has evolved to grant CRAF teams maximum flexibility in obtaining and using MV points.[21] IDA states that teams may need to specialize in either passenger or cargo services, and that doing so would provide greater depth and more assured service should one team member cease operations or otherwise not meet its service commitments.[22] According to IDA, its point was demonstrated last year when ATA declared bankruptcy in April and abruptly ceased passenger operations. The team leader FedEx, a cargo carrier, was unable to quickly muster replacement aircraft from within the team resulting in shortfalls and service delays of two to six days for several weeks.[23]

USTRANSCOM officials generally support teaming arrangements, stating that they provide large carriers the incentives they need to enroll large numbers of their aircraft into the CRAF program. USTRANSCOM officials also believe that the teams, as currently structured, have sufficient depth to absorb mission award shortfalls should one team member cease operations. With regard to the ATA bankruptcy, USTRANSCOM officials believe the Command's ability to work with carriers to fill airlift gaps over a period of weeks actually demonstrated its strong partnership with industry to support the members of the armed forces.

c. Fixed Buy, Expansion Buy and Assured Business

CRAF peacetime business is divided into a "fixed buy" and an "expansion buy." The fixed buy covers airlift support that can be specifically identified for the coming year. For example, a base in Germany might require a known number of transport flights each week to carry out its routine operations. The expansion buy covers other airlift needs that may arise, especially support for contingency operations, for which specific requirements are not known in advance.[24]

The distinction between the fixed buy and the expansion buy is important because the government guarantees payments to CRAF program participants in the amount of the fixed buy at the beginning of each fiscal year. Those guaranteed minimum payments are a particularly attractive incentive to carriers to participate in CRAF because they can count on those funds in formulating their annual business plans.[25]

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[20] IDA, *supra* note 5, at 2.
[21] *Id.* at 8.
[22] *Id.*
[23] *Id.*
[24] CBO, *supra* note 7, at 4.
[25] *Id.*

To strengthen this incentive, USTRANSCOM sought and obtained "assured business" authority in the FY 2009 NDAA. With this authority, USTRANSCOM can increase the contract guaranteed minimum past the level of the fixed buy in years with excessively low requirements. Specifically, DOD can base its annual guaranteed minimum on forecasts, up to 80 percent of its average annual expenditure for charter air transportation services during the previous five years (omitting years of unusually high demand). Because this would allow guaranteed payments to be based on expected rather than known requirements, the government would run some risk of having to pay for services that it might not use.[26]

As an initial benchmark, USTRANSCOM officials indicate that the Command will seek to maintain a guaranteed minimum payment of approximately $400 million per year. Due to continued high wartime requirements, USTRANSCOM will not exercise the assured business authority in FY 2010, which will have requirements estimated to exceed $2.3 billion. It is worth noting that USTRANSCOM projects a sharp decline in CRAF peacetime business around FY 2012.

(in $ millions)

	FY01	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09[27]	FY10	FY11	FY12
Fixed	347.4	504.8	439.7	424.0	274.1	395.8	583.0	377.0	346.1	650.0	663.0	265.0
Expansion	216.4	775.5	1922.0	1554.1	2148.9	2052.2	2000.0	3040.0	1826.3	1653.0	1684.0	671.0
Total	563.8	1280.3	2361.7	1978.1	2423.0	2448.0	2583.0	3417.0	2172.4	2303.0	2347.0	936.0

Source: USTRANSCOM

As part of its "assured supply model," IDA recommended DOD adopt multi-year contracting to strengthen its assured business to, and lock-in multi-year supply commitments from, CRAF carriers.[28] At least one integrated cargo carrier has expressed concerns with this proposal, stating that requiring a carrier to commit to the potential activation over multiple years (as opposed to the current 18 month periodic commitment) would present too much risk and could have a detrimental impact on the program. In any case, multi-year contracting would require additional legislative authority and improved forecasting capability. Section 1033 of the FY 2009 NDAA also requires DOD to improve the predictability of charter airlift requirements. USTRANSCOM is conducting a process review with the goal of improving its forecasting ability.

d. Passenger Charter Airlines

DOD's peacetime passenger airlift capability is highly concentrated among a small group of passenger charter airlines. According to USTRANSCOM, in FY 2008, six passenger charter airlines provided 93 percent of DOD's passenger airlift, three of which provided 77 percent.[29]

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[26] *Id.* at 2.

[27] FY 2009 through April 20, 2009.

[28] IDA, *supra* note 5, at 18.

[29] FY 2008 Percentage of DOD Passenger Lift: ATA Airlines (no longer in operation) - 9.85 percent; Miami Air - 1.75 percent; North American - 23.69 percent; Omni Air - 23.98 percent; Ryan International - 4.85 percent; World Airways - 29.15 percent; Passenger Charter Carrier Total - 93.27 percent.

In the last few years, passenger charter airlines have faced a shrinking civilian charter market. According to the Bureau of Transportation Statistics, between 2003 and 2008, U.S. passenger charter airlines have reduced civilian commercial system capacity (as measured by available seat miles) by 47 percent and civilian revenue passenger traffic (as measured by revenue passenger miles) for these airlines has declined 50 percent.

Industry observers note that in the past, vacation travelers frequently used travel agents and indirect air carriers (i.e., charterers) to plan and book complete vacation packages, often to destinations with high seasonal demand. These charterers, in turn, hired charter airlines as their partners to provide the air transportation part of the vacation package. The growth of low-cost scheduled airlines offering flights to popular tourist destinations like Mexico, and the use of the Internet for direct access to these flights, has resulted in vacationers migrating away from passenger charters to low-cost scheduled airlines. To stay competitive, indirect air carriers are also increasingly purchasing blocks of seats on scheduled airlines instead of chartering the entire capacity of an aircraft since it is less expensive.

These structural changes combined with other macro-economic effects such as the fuel shock of late-2007/2008 and the current economic crisis have all combined to significantly reduce the size of the civilian charter passenger industry. At the same time, the DOD operations in Iraq and Afghanistan have created significant opportunities for these charter airlines. However, as the DOD prepares for the eventual draw down of military activities, there is a concern as to whether some of these carriers have become too dependent on CRAF business, and therefore are particularly vulnerable in a post-Iraq/Afghanistan environment. Should this segment of the industry continue to decline, or even disappear, DOD may become more reliant on CRAF activations to meet passenger airlift requirements. In turn, more frequent CRAF activations could potentially have a disruptive affect on scheduled airlines and adversely impact long-term CRAF participation.

To provide a "soft landing" for passenger charter carriers in the post - Iraq/Afghanistan environment, USTRANSCOM may expand its Patriot Express (PE) network of regularly scheduled DOD passenger missions flown by charter carriers. In peacetime, PE represents the bulk of USTRANSCOM's CRAF contract "fixed buy" for charter passenger carriers. USTRANSCOM is researching means for improving the financial conditions under which PE missions must operate, in the hope of increasing the amount of peacetime business that will be available to charter passenger carriers.

e. The "60/40 Rule"

DOD has maintained a long-standing policy that no more than 40 percent of a CRAF carrier's revenues should come from the government. This policy is commonly referred to as the "60/40 Rule." Carriers that exceed the 40 percent threshold may be penalized by having their MV points reduced commensurate to the percentage exceeded - effectively lowering the limit on the amount of DOD's business they would be entitled to in subsequent years.

According to IDA, DOD aggregate revenues in 2006 represented 30 percent of the market for the cargo charter airlines.[30] However, DOD revenues accounted for 55 percent of the total revenues across all of the passenger charter markets.[31] So, in the aggregate, the passenger

[30] IDA, *supra* note 5 at 9.

charter airlines were not meeting the 60/40 Rule.[32] According to USTRANSCOM, five carriers exceeded 40 percent in FY 2009: Evergreen International, Lynden Air Cargo, Omni Air International, North American and World Airways.

IDA recommends suspending the 60/40 Rule, stating that the strict enforcement of the 60/40 Rule would require DOD to seek other carriers to meet its current contingency requirements, which would cause at least a temporary disruption to the efficient movement of forces overseas. In addition, IDA states that enforcement of this rule could also result in the carriers going out of business.[33]

According to IDA, the original rationale behind the 60/40 Rule is that carriers with a large commercial presence face competitive pressures to improve efficiency, reliability, customer service and safety, and that this rationale is outdated:

> DOD's original concern, 40 years ago, was that "fly-by-night" operators that had no aircraft and no flying history could obtain DOD contracts and then run out and lease aircraft and start an "airline." There is nothing like that occurring now, nor has this occurred in recent history, and should the issue arise it can be prevented easily without the use of the 60/40 rule. With respect to safety, charter airlines are required to maintain their aircraft to the same FAA safety standards as scheduled airlines. No distinction is made in the FAA safety regulations between carriers flying CRAF versus commercial charter vs. scheduled passengers. In addition, the [Secretary of Defense] has directed the Commander of USTRANSCOM to ensure the safety of air carriers supporting DOD.[34]

However, USTRANSCOM officials note that another rationale behind the rule is to ensure that individual participants do not rely too heavily on the DOD's peacetime business because a carrier that dedicated a large portion of its capacity to DOD during peacetime would have little additional capacity to contribute to a wartime surge. USTRANSCOM will retain the 60/40 Rule, but will consider suspending it during periods of high operations tempo (i.e., during a high rate of commercial contracted missions).

USTRANSCOM officials are also considering using block hours (i.e., the amount of time between the moment the aircraft begins moving from the point of origin and the moment it stops moving at the destination) instead of revenue to calculate the 60/40 Rule. According to USTRANSCOM officials, using block hours, which would reflect aircraft usage during a given contract, will more accurately reflect the amount of business a company does with DOD in relation to its commercial business.

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[31] *Id.*
[32] *Id.*
[33] *Id.*
[34] *Id.*

f. Aircraft Utilization and Fuel Efficiency

Aircraft utilization is a measure of productivity and is given in revenue aircraft hours flown per available aircraft day (or month). IDA states, and USTRANSCOM acknowledges, that DOD charter aircraft have lower utilization rates than commercial charter aircraft.

The FY 2009 NDAA requires the Secretary of Defense to incentivize carriers to use newer, more efficient aircraft. IDA notes that low utilization rates make it more economical to use older aircraft, whose high hourly operating costs are more than offset by low capital costs. If higher utilization rates could be obtained, carriers would have improved incentives to use more modern aircraft that cost less to operate and whose higher capital costs could be spread over a larger number of flight hours.[35]

According to USTRANSCOM officials, lower CRAF aircraft utilization rates result largely from the fact that ground times are typically longer on CRAF missions than for comparable commercial flights. An aircraft that spends more time on the ground versus in the air will have a lower utilization over the long run. The primary reason for low CRAF utilization is because unlike commercial flights, which occur between airports that the airline industry controls, CRAF missions often transit bases that are not controlled by AMC. As a result, ground times are affected by a number of functions that are not totally under the control of AMC.

USTRANSCOM officials state that the Command will undertake several measures to reduce ground times and increase aircraft utilization rates. For example, from July to September 2009, USTRANSCOM will test extended range cargo missions with non-stop 5,000 nm service. This will eliminate the en route fuel stop and associated ground time. In addition, USTRANSCOM has begun implementing process improvements, such as concurrent servicing (i.e., fueling aircraft while passengers are on board) at some airfields, which has resulted in reducing ground times by at least 30 minutes.

III. Other Issues

a. Man Portable Air Defense Systems (MANPADS)

Shoulder-fired surface-to-air missiles (SAMs), also known as MANPADS (man-portable air defense systems) were developed in the late 1950s to provide military ground forces protection from enemy aircraft.[36] Published estimates on the number of missiles presently being held in international military arsenals range from 350,000 to 500,000.[37] Moreover, other unclassified estimates suggest that between 25 and 30 non-state groups also possess MANPADS.[38]

According to the National Air Carriers Association (NACA), whose members include CRAF carriers, CRAF carriers are increasingly flying missions into conflict areas like Iraq and Afghanistan.

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[35] *Id.*

[36] Christopher Bolkcom and Bartholomew Elias, CRS Report for Congress: Homeland Security -Protecting Airliners from Terrorist Missiles 1 (2006).

[37] *Id.* at 3.

[38] *Id.* at 4.

Therefore, NACA has proposed that the government establish an evaluation program whereby 10 CRAF aircraft would be outfitted with counter-MANPADS technology, which it estimates would cost approximately $20 million.

USTRANSCOM officials acknowledge more CRAF passenger missions are being flown into Iraq because of the decrease in threat conditions. In addition, USTRANSCOM officials state that using CRAF to transport cargo and passengers directly into Iraq and Afghanistan reduces tasking of C-17's that would otherwise bring cargo and passengers into those countries from external hubs. USTRANSCOM officials do not envision a requirement for CRAF aircraft to be equipped with counter-MANPADS technology. According to USTRANSCOM, CRAF charter missions fly only to locations that have been vetted and selected based on threat assessments and force protection requirements. CRAF aircraft do not fly into known MANPAD threat areas.

To date, with the exception of NACA, airline groups have, for several reasons, generally opposed the concept of equipping commercial aircraft with counter-MANPADS technology. Airline groups believe that the technology, as it exists, must be repaired or refurbished too often to be compatible with commercial use; and that the associated maintenance and logistical infrastructure would make it cost prohibitive. The Department of Homeland Security (DHS) is in the final "in-service" evaluation phase of a multi-year program to demonstrate the feasibility of reengineering and migrating military technologies to protect commercial aircraft against MANPADs. Specifically, DHS is testing two Direct Infrared Countermeasures (DIRCM – an infrared device that jams missile guidance systems) manufactured by Northrop Grumman Corp. and BAE Systems. DHS is expected to report its findings to Congress later this year.

WITNESSES

PANEL I

General Duncan J. McNabb, USAF
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PANEL II

Mr. Frederick W. Smith
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Mr. Brian Bauer
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Atlas Air Worldwide Holdings, Inc

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